

**Table S8. Liver cancer progression-associated gene signature.** Identification of 20 genes from the zebrafish up-regulated enriched genes in both hyperplasia and carcinoma stages which remained up-regulated throughout human HCC progression from dysplasia (supplementary material Table S6) to carcinoma (supplementary material Table S7). These genes represent potential biological markers associated with liver cancer progression.

No.	Gene Symbol	Gene Name
1	APOE	Apolipoprotein E
2	CCNB1	Cyclin B1
3	CDC25A	Cell division cycle 25 homolog A (S. pombe)
4	DERL1	Der1-like domain family, member 1
5	MAPK1	Mitogen-activated protein kinase 1
6	MAPK3	Mitogen-activated protein kinase 3
7	MAPKAPK2	Mitogen-activated protein kinase-activated protein kinase 2
8	MCM5	Minichromosome maintenance complex component 5
9	MDM2	Mdm2 p53 binding protein homolog (mouse)
10	MMP14	Matrix metalloproteinase 14 (membrane-inserted)
11	NBN	Nibrin
12	NLK	Nemo-like kinase
13	PIK3CA	Phosphoinositide-3-kinase, catalytic, alpha polypeptide
14	PRKCB1	Protein kinase C, beta
15	RRM2	Ribonucleotide reductase M2
16	RUVBL2	RuvB-like 2 (E. coli)
17	SRC	v-Src sarcoma (Schmidt-Ruppin A-2) viral oncogene homolog (avian)
18	THY1	Thy-1 cell surface antigen
19	TK1	Thymidine kinase 1, soluble
20	YWHAB	Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta polypeptide